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# Measuring the Economic, Social, and Environmental Impacts of Special Events A Mixed Methods Approach

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# **Measuring the Economic, Social, and Environmental Impacts of Special Events**

## **A Mixed Methods Approach**

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## **A Mixed Methods Approach**

### **Introduction**

Special events are emerging worldwide as a growing and vibrant sector of the tourism industry and are seen as valuable in destination promotion and providing significant economic benefits to host communities. Thus, the economic impact of special events on host communities has been extensively studied. However, few studies have been conducted to evaluate the social and environmental impacts of special events on a location. As event tourism grows in popularity, the impact that special events have on local communities will continue to increase. It is important to understand not only the economic impacts of these events but also the social and environmental impacts, especially from a management perspective.

The purpose of this study is to develop a mixed-methodological approach to measuring an events' effectiveness in relation to the Triple Bottom Line (TBL). Using a two-year approach, this study uses a blend of organization statistics, results of a participant study and trash audits to examine the events' progression in relation to the TBL.

### **Literature Review**

The growth in popularity of events, as discussed in the previous section, has led to an increase in event research and applied work. However, the focus of such research has primarily concentrated on the use of monetary measures; such as, economic impacts, to illustrate the outcomes and overall worth of events. In fact, as a result of several assessments of event-related research, a number of scholars have highlighted a bias towards economic measurements of events (Getz, 2000; Sherwood, Jago, & Deery 2004, 2005; Hede et al., 2002; Formica, 1998).

For example, from his review of articles published in *Festival Management* and *Event Tourism* (presently *Event Management*), Getz (2000) concluded that one of the most frequently studied topics within the event literature was economic development and impacts. Similar findings were put forth by Sherwood, Jago, and Deery (2004, 2005), Hede et al. (2002), and Formica (1998) which also suggested a majority of event-related assessments and academic studies have been evaluated from a predominately economic impact perspective.

This continued bias towards an economic focus and evaluation of events has led scholars and stakeholders to suggest the need for a more holistic evaluation of events, including a social and environmental evaluative focus as well as an economic focus; or what is commonly referred to as the Triple Bottom Line (TBL) approach (Dwyer, 2005; Fredline, et al. 2004, 2005; Getz 2008, 2009; Hede, Jago, & Deery, 2002, 2003; Sherwood, 2007; Sherwood, Jago, & Deery 2004, 2005). This notion of wanting to measure performance beyond the traditional means of the financial bottom line became popular in the 1990s among many businesses and corporations. However, it was not until the mid to late 1990s that the term TBL was coined by management consultant John Elkington (1994, 1998). TBL has also been referred to as 3P; ‘People, Planets, and Profits’; and/or the 3 P’s (Henriques & Richardson, 2004).

While it is often difficult to find an exact or shared definition of TBL, it has been described as a type of reporting that “defines a company’s ultimate worth in financial, social, and environmental terms...respond[s] to *all* stakeholder demands that companies take part in, be accountable for, and substantiate their membership in society” (Norman & MacDonald, 2004, p.245)...”reporting that gives consideration to financial outcomes, environmental quality, and social equity” (Gilkison, 1999, p. 2)... “return on capital investment when evaluated and measure along financial, social, and environmental dimensions” (Sauvante, 2001, p. 2). Overall,

TBL takes evaluating, reporting, and planning beyond the traditional economic and financial aspects of a business or entity to also include social and environmental aspects in order to maximize performance.

Much of TBL's popularity has come from increased stakeholder pressure for businesses and organizations to be more accountable and more responsible for their social and environmental impacts. From this stakeholder pressure, appeals for businesses to become more sustainable, focusing less on short-term financial bottom lines and more on long term impacts and values, have also been voiced. As noted by Dwyer (2005), "Sustainability from a corporate perspective (i.e., the ability for a corporation to persist in a healthy state for as long as the participants wish it to persist) results from producing a positive and balanced return to all three of these sources of capital (i.e., the TBL)" (p. 80-81). Similar demands for increased accountability and responsibility for impacts are becoming increasingly voiced throughout event literature. In fact, Fredline, Raybould, Jago, and Deery (2005) stated "the rationale behind the Triple Bottom Line reporting [within the context of special events] is to illuminate the externalities associated with business activities and therefore to promote sustainability through planning and management practices that ameliorate negative outcomes and promote positive ones" (p.3).

Over the years, attempts have been made to evaluate events beyond economic impacts, using a more comprehensive approach. For example, in 1984, Ritchie proposed a conceptual framework comprised of six different types of impacts for evaluating hallmark events. Shortly after Ritchie's influential work, Burns, Hatch, and Mules (1986) conducted one of the first cost-benefit analyses that included both social and economic dimensions. A later study by Dwyer, Mellor, Mistilis, and Mules (2000a, 2000b), used a weighting system of 'plusses' and 'minuses'

(rather than dollar amounts) to not only measure more traditional, tangible economic impacts but also several less tangible, social impacts. While this study moved the literature closer to a more holistic framework, it was missing one of the three TBL dimensions; it did not include an examination of environmental impacts. In an attempt to create a more standardized model for evaluating events, Carlsen, Getz, and Soutar (2001), proposed a pre- and post- event impact evaluation criterion which included all three dimensions of TBL but did not provide a means by which to measure the proposed criteria.

The first event evaluation study to refer specifically to the TBL framework was conducted by Hede, Jago, and Deery (2002, 2003); in doing so, the authors noted that special event evaluation research “must now be conducted from a triple bottom line perspective and research is needed to ensure that this occurs” (p. 11). Additional research followed Hede et al. not only supporting the use of TBL reporting for events but proposing various conceptual frameworks and approaches (e.g., Fredline, et al 2004; Sherwood, et al 2004). And while support of a more holistic approach to special event evaluation and reporting has received increase support from researchers, an examination by Sherwood, et al. (2005) of 84 special event impact assessments conducted between 1985-2004 suggested that a more holistic approach is not necessarily being implemented in event impact assessments. For example, of the total 84 assessments reviewed, Sherwood et al. noted 49 of the reports only assessed economic impacts; 32 assessed both economic and social impacts; 2 assessed economic, social, and environmental impacts; and 1 assessed both economic and environmental impacts.

One explanation for the findings put forth by Sherwood, et al. (2005) involves the relative newness of using TBL as an evaluative framework for events. However, even though TBL has been gaining attention among event scholars, missing is a standardized tool by which to evaluate

the economic, social, and environmental impacts of events as one integrated framework versus three separate dimensions. As noted by Dwyer (2005), “TBL measurements must be based on solid information of better quality than is generally available now...Until (if ever) a common measurement is created and achieves broad acceptance, the accounting and reporting of the three sector of the ‘Triple Bottom Line’ will continue to be measured and reported separately and against a variety of criteria” (p. 88).

The only attempts known to date at creating a set of event-specific indicators by which to provide a more standardized means of assessing the three TBL dimensions is the dissertation research put forth by Sherwood (2007) and the proposed framework put forth by Fredline, et al. (2004, 2005). Using a seven-step indicator development process, Sherwood analyzed 224 academic event evaluation publications and 85 event impact assessments from which he developed a list of 20 key impacts. Using a modified web-based Delphi survey of event experts, a total of 24 indicators were developed to measure the 20 impacts. Using two special events as case studies, Sherwood used intercept and mail surveys to examine event attendees, exhibitors, and local residents in order to test the appropriateness of a subset of the indicators for inclusion in a TBL evaluation model. Results of this study demonstrated that evaluating events using a TBL framework is possible but as noted by Sherwood, “further research is needed to develop the indicators and design a model that integrates the indicators into an overall assessment of the impact of events on the host destination” (248). In examining the applicability of TBL for event evaluation, Fredline, et al. (2004, 2005) explored potential TBL indicators and, using a scoring system of zero to ten, proposed a framework with scales for plotting each of the dimensions. While the authors successfully proposed a multi-dimensional framework, the three scales were quite different; further research is needed establish a more standardized measurement. Further,

this scale was complex in nature and would be difficult for event managers to implement on a year-by-year basis. In response, the overall purpose of the current study was to develop a more standardized method to examine the TBL, or the economic, social, and environmental impacts, of special events.

## **Methods**

The purpose of this research is to evaluate the economic, social, and environmental impacts of special events on host communities and to develop an instrument to measure these triple bottom line impacts as perceived by residents and visitors. A TBL assessment tool was developed to measure the impacts of the Cooper River Bridge Run on the Charleston, South Carolina Community. The assessment tool was based on the following theoretical foundations.

### Economic Impacts

This analysis consisted of measuring the event impacts primarily upon job creation, the generation of tax and business revenues as well as total donations to not-for-profits. The primary measures of these figures derive from the participant survey. In that survey, respondents were asked about spending in an assortment of areas. Only spending from out-of-town guests was used in these calculations. The economic impact, jobs creation statistics and the tax dollar figures were derived from use of the IMPLAN model.

### Social Impacts

As illustrated in the review of literature, the social impacts are usually associated with three main concepts: involvement, attachment, and pride. Involvement was measured by the total number of volunteers and by increased levels of recreational opportunities Attachment was measured by examining the percentage of returning participants in the current year and the percentage of participants who planned to participate the following year as well as a survey question related to



community attachment by residents. Finally pride measured whether the participants perceive the event is a positive addition to the community and whether residents felt the event was a source of pride for the community.

### Environmental

The environmental aspect was measured using two dimensions: 1) actions; and 2) awareness.

Actions were measured by a trash audit which measured the total volume of recycling.

Awareness was measured via participant survey questions related to increasing awareness.

Data was collected from the participants of the Cooper River Bridge Run in April 2009 and then again in April 2010. In both years, the race attracted approximately 38,000 runners. Forty-eight hours after the run was completed, the participants who registered on-line for the race were sent the on-line survey. The survey was also available on the Cooper River Bridge Run web site after the race. In 2009, 2,107 surveys were collected. In 2010, that number rose 9,092. The number of surveys collected were increased dramatically due to the race organization emphasizing registering online thus increasing the number of valid email addresses dramatically.

### **Results**

As is illustrated in Table 1, the event's economic impact upon the community was lessened from 2009 to 2010. All categories, with the exception of total donations to not-for-profits, saw a decrease. This decrease is most likely related to the economic downturn in the United States. In examining these numbers deeper, the primary change was that the average length of stay was reduced from 2.5 nights in 2009 to 2.1 nights in 2010. This reduction in length of stay caused a reduction in overall spending across almost every category. In total, the economic impact decreased \$2,177,398.00 from 2009 to 2010. The cascading effect of this decrease was reflected in the job creation numbers and the total tax revenue that was generated.

In examining the social constructs, the level of involvement was constant in relation to the total number of volunteers; however, the overall level of repeat visitation grew. When compared to the overall satisfaction scores (5.2/6 – 2009 & 5.1/6 – 2010) for the race as a whole, this increase is unsurprising. Also, the number of volunteers ‘sold out’ at a much faster pace in 2010 compared to 2009, this demonstrates that the level of involvement with the run is healthy. As for attachment, there was an increase in the perceptions related to the community attachment. This may be reflected in the increased repeat participation that the race experienced. Finally, in relation to pride, participant perceptions related to pride either held steady or demonstrated an increase.

In exploring the environmental aspects of the race, there was a dramatic increase in the amount of plastics recycling. This was a result of the race organizers placing an emphasis on their recycling program and providing runners ample opportunity to participate. Further, while the numbers in relation to cardboard/paper recycling were down, this was actually a positive step in that the total usage of paper/cardboard was reduced dramatically through a new environmental initiative. Finally, while the actions were stronger, there is a need to enhance the educational component as that score reduced from 2009 to 2010.

## **Discussion**

The methodologies employed in this study provide insights into creating a standardized evaluation tool for TBL. Testing this strategy on the CRBR has provided indications that the event is improving on the environmental measures, holding steady on the social measures and needs to address the economic issues. The tool is effective in demonstrating year-over-year changes in measures across the TBL spectrum. It should be noted however, that conclusions based on just a two-year analysis need to be tempered. Ideally, this assessment tool used over a

five- to ten-year period would provide a basis against moving averages. In general, this research indicates that there is a need for more longitudinal research to be conducted within this realm. It is only through time-series that true patterns can be established. Carlsen, Getz, and Soutar (2001) noted the importance of establishing a baseline to which events should be judged upon. Establishing a consistent year-to-year measurement system addresses this core concern.

The second primary issue is to determine levels of acceptability. As was outlined by Dwyer (2005) there is a need to quantify in order to establish a pattern in which accountability can be ascertained. In order to establish accountability, the development of a yearly assessment tool must be developed in tandem with the organization's goal and objectives. An event using this type of assessment tool should be able to ascertain its strengths and weaknesses through assessment and thus design programs to address identified weaknesses. In this case, an external factor (the recession) is most likely to be the main reason for decreases in the economic area. With that in mind however, this assessment tool demonstrates that perhaps more emphasis should be placed on expanding the economic model. The race could partner with local hoteliers and restaurants to create enticing packages that would increase the length of stay back to its previous levels, or focus on increasing use, support, and promotion of local businesses. This tool would allow for judgment as to the success or failure of these initiatives.

**Table 1: TBL Assessment Tool**

<b>Economic</b>	<b>2009</b>	<b>2010</b>	<b>Change</b>
Avg. Spending per person	\$301.00	\$208.17	-\$92.83
Avg. Economic impact per person	\$529.60	\$347.13	-\$182.47
Avg. Number of jobs created	200.4	102.7	-97.7
Avg. tax dollar per out of town participant	\$94.73	\$27.82	-\$66.91
Total donations to not-for-profits	\$0.00	\$110,000	n/a
<b>Social Impacts</b>			
Total number of volunteers	3500	3500	0
People are more attached to the	4.0	4.2	+0.2

city/community as a result of the CRBR (avg. score on five point scale).			
After participating in the CRBR, I will recommend participating in this race to friends and family next year (avg. score on five point scale).	4.6	4.6	0
Repeat Visitation: Including this race, how many times have you participated in the Cooper River Bridge Run?	52.3%	56.4%	+4.1%
The CRBR provides recreational opportunities for residents (avg. score on five point scale).	4.6	4.7	+0.1
The city/community is a better place as a result of the CRBR (avg. score on five point scale).	4.3	4.4	+0.1
The CRBR increases community Involvement (avg. score on five point scale).	4.7	4.6	-0.1
The CRBR is a source of pride for the community (avg. score on five point scale).	4.8	4.8	0
<b>Environment</b>			
Total amount of recycling (plastics in lbs.)	4,280	12,000	+7,720
Total amount of recycling (paper & cardboard in lbs.)	8,600	6,000	-2,600
The CRBR encourages alternative forms of transportation that reduce gas consumption such as public transportation, bicycle riding, carpooling, etc (avg. score on five point scale).	4.1%	3.2%	-.9%
It was apparent that the CRBR recycled waste produced at the event (avg. score on five point scale).	4.2	4.1	-0.1

## Conclusion

Studying the triple bottom line and evaluating social, environmental, and economic impacts simultaneously will allow researchers to make recommendations for event managers so that the outcomes of special events can be enhanced for the participants as well as the community. In addition, measuring the environmental impacts of an event will become increasingly important as more and more events are encouraged to “go green” and reduce their impacts on the environment. Furthermore, measuring the impacts of special events will help destination promotion agencies such as convention and visitors bureau articulate the additional value of special events from a social perspective. Results of this study indicate that a mixed-

methods approach to assessing TBL can provide valuable insights to event managers and assist them in planning and modifying future events.

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